

Amendments to the Drawings:

The attached replacement sheets (36 pages) of drawings replaces the original drawings filed with the application.

Please substitute the attached replacement sheets of formal drawings for the original Figures as follows:

- New Figs. 1A-E for original Fig. 1.
- New Figs. 2A-E for original Fig. 2.
- New Figs. 3A-E for original Fig. 3.
- New Fig. 4 for original Fig. 4.
- New Fig. 5 for original Fig. 5.
- New Figs. 6A-G for original Fig. 6.
- New Fig. 7 for original Fig. 7.
- New Fig. 8 for original Fig. 8.
- New Fig. 9 for original Fig. 9.
- New Fig. 10 for original Fig. 10.
- New Fig. 11 for original Fig. 11.
- New Fig. 12 for original Fig. 12.
- New Fig. 13 for original Fig. 13.
- New Fig. 14 for original Fig. 14.
- New Figs. 15A-B for original Fig. 15.
- New Fig. 16 for original Fig. 16.
- New Figs. 17A-D for original Fig. 17.
- New Fig. 18 for original Fig. 18.
- New Fig. 19 for original Fig. 19.
- New Fig. 20 for original Fig. 20.
- New Fig. 21 for original Fig. 21.

Applicant : Gino V. Segre et al.
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Page : 14

Attorney's Docket No. 00786-071005

The attached replacement sheets of drawings includes a change to Figures 3A-E. In those figures the numbering of amino acid residues has been shifted one amino acid beginning at amino acid residue 290. A copy of original Figure 3 is attached hereto which shows the amendment in red ink.

REMARKS

Applicants request that the above amendments to the specification be entered to correct inadvertent typographical errors, to conform the specification to the formal drawings filed herewith and to update the claim of priority.

Applicants point out that they have requested that the priority claim be amended to recite that the present application is divisional of U.S. Application Serial No. 08/471,494, filed June 6, 1995, now U.S. Patent No. 5,840,853, and a continuation of U.S. Application Serial No. 08/468,249, filed June 6, 1995, now U.S. Patent No. 5,886,148. The Sequence Listing shown on pages 51-62 of the specification has been replaced with the Sequence Listing filed November 6, 2000. Applicants also note that the numbering of amino acid residues in Figs. 3A-E has been shifted one amino acid beginning at amino acid residue 290 in the enclosed formal drawings. This change was made to correct an obvious numbering error present in the drawings as filed. No changes have been made in the corresponding nucleotide and amino acid sequence.

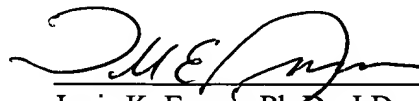
These amendments add no new matter to the application and raises no new issues.

No fee is believed due. Please apply any other charges or credits to Deposit Account No. 06-1050, referencing Attorney Docket No. 00786-071005.

Respectfully submitted,

Date: _____

11/5/04

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GGCGGGGGCC	GCGGCGGCGA	GCTCGGAGGC	CGGCGGCGGC	TGCCCCGAGG	GACGCGGCCC	60										
TAGGCGGTGG	CG	ATG	GGG	GCC	GCC	CSG	ATC	GCA	CCC	AGC	CTG	GCG	CTC	108		
		Met	Gly	Ala	Ala	Arg	Ile	Ala	Pro	Ser	Leu	Ala	Leu			
		1				5					10					
CTA	CTC	TGC	TGC	CCA	GTG	CTC	AGC	TCC	GCA	TAT	GCG	CTG	GTG	GAT	GCG	120
Leu	Leu	Cys	Cys	Pro	Val	Leu	Ser	Ser	Ala	Tyr	Ala	Leu	Val	Asp	Ala	
		15				20					25					
GAC	GAT	GTC	TTT	ACC	AAA	GAG	GAA	CAG	ATT	TTC	CTG	CTG	CAC	CGT	GCC	204
Asp	Asp	Val	Phe	Thr	Lys	Glu	Glu	Gln	Ile	Phe	Leu	Leu	His	Arg	Ala	
	30					35					40					
CAG	GCG	CAA	TGT	GAC	AAG	CTG	CTC	AAG	GAA	GTT	CTG	CAC	ACA	GCA	GCC	228
Gln	Ala	Gln	Cys	Asp	Lys	Leu	Leu	Lys	Glu	Val	Leu	His	Thr	Ala	Ala	
45					50				55						60	
AAC	ATA	ATG	GAG	TCA	GAC	AAG	GGC	TGG	ACA	CCA	GCA	TCT	ACG	TCA	GGG	300
Asn	Ile	Met	Glu	Ser	Asp	Lys	Gly	Trp	Thr	Pro	Ala	Ser	Thr	Ser	Gly	
			65					70						75		
AAG	CCC	AGG	AAA	GAG	AAG	GCA	TCG	GGA	AAG	TTC	TAC	CCT	GAG	TCT	AAA	348
Lys	Pro	Arg	Lys	Glu	Lys	Ala	Ser	Gly	Lys	Phe	Tyr	Pro	Glu	Ser	Lys	
			80					85					90			
GAG	AAC	AAG	GAC	GTG	CCC	ACC	GGC	AGC	AGG	CGC	AGA	GGG	CGT	CCC	TGT	396
Glu	Asn	Lys	Asp	Val	Pro	Thr	Gly	Ser	Arg	Arg	Arg	Gly	Arg	Pro	Cys	
		95					100					105				
CTG	CCC	GAG	TGG	GAC	AAC	ATC	GTT	TGC	TGG	CCA	TTA	GGG	GCA	CCA	GGT	444
Leu	Pro	Glu	Trp	Asp	Asn	Ile	Val	Cys	Trp	Pro	Leu	Gly	Ala	Pro	Gly	
	110					115					120					
CAA	GTG	GTG	GCA	GTA	CCT	TGT	CCC	CAT	TAC	ATT	TAT	GAC	TTC	AAT	CAC	480
Phe	Val	Val	Ala	Val	Pro	Cys	Pro	Asp	Tyr	Ile	Tyr	Asp	Phe	Asn	His	
125					130					135					140	
AAA	GGC	CAT	GCC	TAC	AGA	CGC	TGT	CAC	CGC	AAT	GGC	AGC	TGG	GAG	GTG	540
Lys	Gly	His	Ala	Tyr	Arg	Arg	Cys	Asp	Arg	Asn	Gly	Ser	Trp	Glu	Val	
			145					150					155			
GTT	CCA	GGG	CAC	AAC	CGG	ACG	TGG	GCC	AAC	TAC	AGC	GAG	TGC	CTC	AAG	588
Val	Pro	Gly	His	Asn	Arg	Thr	Trp	Ala	Asn	Tyr	Ser	Glu	Cys	Leu	Lys	
			160					165				170				
PTC	ATG	ACC	AAT	GAG	ACG	CGG	GAA	CGG	GAG	GTA	TTT	GAC	CGC	CTA	GGC	636
Phe	Met	Thr	Asn	Glu	Thr	Arg	Glu	Arg	Glu	Val	Phe	Asp	Arg	Leu	Gly	
		175					180					185				
ATG	ATC	TAC	ACC	GTG	GGA	TAC	TCC	ATG	TCT	CTC	GCC	TCC	CTC	ACG	GTG	684
Met	Ile	Tyr	Thr	Val	Gly	Tyr	Ser	Met	Ser	Leu	Ala	Ser	Leu	Thr	Val	
	190					195					200					

GCT	GTG	CTC	ATC	CTG	GCC	TAT	TTT	AGG	CGG	CTG	CAC	TGC	ACG	CGC	AAC	732
Ala	Val	Leu	Ile	Leu	Ala	Tyr	Phe	Arg	Arg	Leu	His	Cys	Thr	Arg	Asn	
205					210					215					220	
TAC	ATC	CAC	ATG	CAC	ATG	TTC	CTG	TCG	TTT	ATG	CTG	CGC	GCC	GCG	AGC	780
Tyr	Ile	His	Met	His	Met	Phe	Leu	Ser	Phe	Met	Leu	Arg	Ala	Ala	Ser	
				225					230					235		
ATC	TTC	GTG	AAG	GAC	GCT	GTG	CTC	TAC	TCT	GGC	TTC	ACG	CTG	GAT	GAG	828
Ile	Phe	Val	Lys	Asp	Ala	Val	Leu	Tyr	Ser	Gly	Phe	Thr	Leu	Asp	Glu	
			240					245					250			
GCC	GAG	CGC	CTC	ACA	GAG	GAA	GAG	TTG	CAC	ATC	ATC	GCG	CAG	GTG	CCA	876
Ala	Glu	Arg	Leu	Thr	Glu	Glu	Glu	Leu	His	Ile	Ile	Ala	Gln	Val	Pro	
		255					260					265				
CCT	CCG	CCG	GCC	GCT	GCC	GCC	GTA	GGC	TAC	GCT	GGC	TGC	CGC	GTG	GCG	924
Pro	Pro	Pro	Ala	Ala	Ala	Ala	Val	Gly	Tyr	Ala	Gly	Cys	Arg	Val	Ala	
	270					275					280					
GTG	ACC	TTT	TTT	CTC	TAC	TTT	CTG	GCT	ACC	AAC	TAC	TAC	TGG	ATT	CTG	972
Val	Thr	Phe	Phe	Leu	Tyr	Phe	Leu	Ala	Thr	Asn	Tyr	Tyr	Trp	Ile	Leu	
285				290 <u>290</u>				295 <u>295</u>	<u>295</u>	<u>295</u>				300 <u>300</u>	<u>300</u>	
GTG	GAG	GGG	CTG	TAC	TTG	CAC	AGC	CTC	ATC	TTC	ATG	GCC	TTT	TTC	TCA	1020
Val	Glu	Gly	Leu	Tyr	Leu	His	Ser	Leu	Ile	Phe	Met	Ala	Phe	Phe	Ser	
			305 <u>305</u>					310 <u>310</u>	<u>310</u>				315 <u>315</u>	<u>315</u>		
GAG	AAG	AAG	TAC	CTG	TGG	GGC	TTT	ACC	ATC	TTT	GGC	TGG	GGT	CTA	CCG	1068
Glu	Lys	Lys	Tyr	Leu	Trp	Gly	Phe	Thr	Ile	Phe	Gly	Trp	Gly	Leu	Pro	
		320 <u>320</u>					325 <u>325</u>	<u>325</u>				330 <u>330</u>	<u>330</u>			
GCT	GTC	TTT	GTG	GCT	GTG	TGG	GTC	GCT	ATC	AGA	GCA	ACC	TTG	GCC	AAC	1116
Ala	Val	Phe	Val	Ala	Val	Trp	Val	Gly	Val	Arg	Ala	Thr	Leu	Ala	Asn	
335 <u>335</u>						340 <u>340</u>					345 <u>345</u>	<u>345</u>				
ACT	GGG	TGC	TTG	GAT	CTG	AGC	TCC	AGG	ATC	AAG	AAG	TGG	ATC	ATC	CAG	1164
Thr	Gly	Cys	Trp	Asp	Leu	Ser	Ser	Ala	His	Lys	Lys	Trp	Ile	Ile	Gln	
350 <u>350</u>					355 <u>355</u>					360 <u>360</u>	<u>360</u>				365 <u>365</u>	
GTG	CCC	ATC	CTG	GCA	TCT	GTT	GTG	CTC	AAC	TTC	ATC	CTT	TTT	ATC	AAC	1212
Val	Pro	Ile	Leu	Ala	Ser	Val	Val	Leu	Asn	Phe	Ile	Leu	Phe	Ile	Asn	
<u>365</u>				370 <u>370</u>				375 <u>375</u>	<u>375</u>				380 <u>380</u>	<u>380</u>		
ATC	ATC	CGG	GTG	CTT	GCC	ACT	AAG	CTT	CGG	GAG	ACC	AAT	GCG	GGC	CGG	1260
Ile	Ile	Arg	Val	Leu	Ala	Thr	Lys	Leu	Arg	Glu	Thr	Asn	Ala	Gly	Arg	
			385 <u>385</u>					390 <u>390</u>	<u>390</u>				395 <u>395</u>	<u>395</u>		
TGT	GAC	ACC	AGG	CAG	CAG	TAC	CGG	AAG	CTG	CTC	AGG	TCC	ACG	TTG	GTG	1308
Cys	Asp	Thr	Arg	Gln	Gln	Tyr	Arg	Lys	Leu	Leu	Arg	Ser	Thr	Leu	Val	
		400 <u>400</u>					405 <u>405</u>	<u>405</u>				410 <u>410</u>	<u>410</u>			

Amendment in Reply to Office action of August 5, 2004

Annotated Sheet Showing Change(s)

CTC GTG CCG CTC TTT GGT GTC CAC TAC ACC GTC TTC ATG GCC TTG CCG Leu Val Pro Leu Phe Gly Val His Tyr Thr Val Phe Met Ala Leu Pro 415 <u>415</u> 420 <u>420</u> 425 <u>425</u>	1356
TAC ACC GAG GTC TCA GGG ACA TTG TGG CAG ATC CAG ATG CAT TAT GAG Tyr Thr Glu Val Ser Gly Thr Leu Trp Gln Ile Gln Met His Tyr Glu 430 <u>430</u> 435 <u>435</u> 440 <u>440</u> 445	1404
ATG CTC TTC AAC TCC TTC CAG GGA TTT TTT GTT GCC ATC ATA TAC TGT Met Leu Phe Asn Ser Phe Gln Gly Phe Phe Val Ala Ile Ile Tyr Cys 445 450 <u>450</u> 455 <u>455</u> 460 <u>460</u>	1452
TTC TGC AAT GGT GAG GTG CAG GCA GAG ATT AGG AAG TCA TGG AGC CGC Phe Cys Asn Gly Glu Val Gln Ala Glu Ile Arg Lys Ser Trp Ser Arg 465 <u>465</u> 470 <u>470</u> 475 <u>475</u>	1500
TGG ACA CTG GCG TTG GAC TTC AAG CGC AAA GCA CGA AGT GGG AGT AGC Trp Thr Leu Ala Leu Asp Phe Lys Arg Lys Ala Arg Ser Gly Ser Ser 480 <u>480</u> 485 <u>485</u> 490 <u>490</u>	1548
AGC TAC AGC TAT GGC CCA ATG GTG TCT CAC ACG AGT GTG ACC AAT GTG Ser Tyr Ser Tyr Gly Pro Met Val Ser His Thr Ser Val Thr Asn Val 495 <u>495</u> 500 <u>500</u> 505 <u>505</u>	1596
GGC CCC CGT GCA GGA CTC AGC CTC CCC CTC AGC CCC CGC CTG CCT CCT Gly Pro Arg Ala Gly Leu Ser Leu Pro Leu Ser Pro Arg Leu Pro Pro 510 <u>510</u> 515 <u>515</u> 520 <u>520</u> 525	1644
GCC ACT ACC AAT GGC CAC TCC CAG CTG CCT GGC CAT GCC AAG CCA GGG Ala Thr Thr Asn Gly His Ser Gln Leu Pro Gly His Ala Lys Pro Gly 525 530 <u>530</u> 535 <u>535</u> 540 <u>540</u>	1692
GCT CCA GCC ACT CAG ACT GAA ACC CTA CCA GTC ACT ATG GCG GTT CCC Ala Pro Ala Thr Glu Thr Glu Thr Leu Pro Val Thr Met Ala Val Pro 545 <u>545</u> 550 <u>550</u> 555 <u>555</u>	1740
AAG GAC GAT GGA TTC CTT AAC GGC TCC TCC TCA GGC CTG GAT GAG GAG Lys Asp Asp Gly Phe Leu Asn Gly Ser Cys Ser Gly Leu Asp Glu Glu 560 <u>560</u> 565 <u>565</u> 570 <u>570</u>	1788
GCC TCC GGG TCT GCG CGG CCG CCT CCA TTG TTG CAG GAA GGA TGG GAA Ala Ser Gly Ser Ala Arg Pro Pro Pro Leu Leu Gln Glu Gly Trp Glu 575 <u>575</u> 580 <u>580</u> 585 <u>585</u>	1836
ACA GTC ATG TGACTGGCA CTAGGGGGCT AGACTGCTGG CCTGGGCACA Thr Val Met 590 <u>590</u>	1885
TGGACAGATG GACCAAGAAG CCAGTGTTTC GCTSGTTGTC TATTCGGGAT CTGGACCAGG	1945
AAGATAACAA AAGGAAAATG GAAGTGGACC AAGCAGAGAA GAAGGAAGAG GTTTTGCAGG	2005
AATTAAATAT GTTTCCTCAG TTGGATGATG AGGACACAAG GAAGGC	2051